

# PATENT ABSTRACTS OF JAPAN

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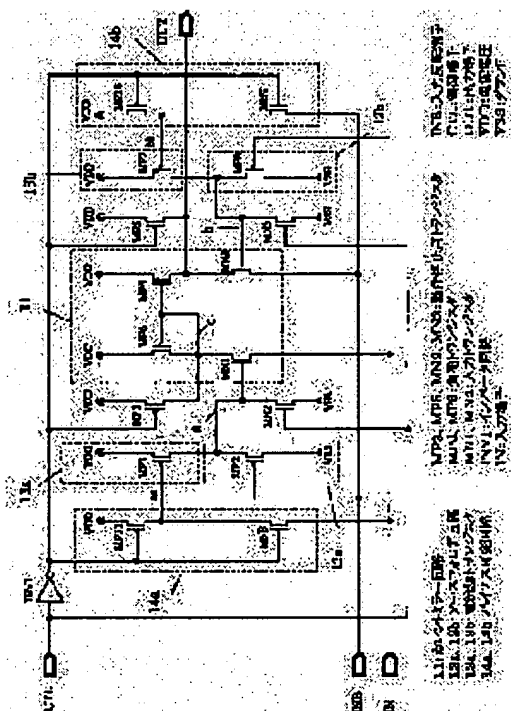
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## (54) LEVEL SHIFTER CIRCUIT AND IMAGE DISPLAY APPLICATION EQUIPMENT

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To solve the problem that a conventional level shifter circuit is unable to perform sufficiently stable driving because of small margins to fluctuation in an input signal voltage, a frequency and a power supply voltage.

**SOLUTION:** This level shifter circuit is provided with a current mirror circuit 11 which has a transistor having a prescribed threshold for converting the input signal of low amplitude to the output signal of high amplitude, a circuit composed of source follower circuits 12a and 12b and current source transistor circuits 13a and 13b for adding offset to the input signal and supplying it to the current mirror circuit 11, and bias varying circuits 14a and 14b for changing bias for determining offset to be added based on the input signal and supplying it to the current source transistor circuits 13a and 13b.



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